Reaction(I)

HO
$$\longrightarrow$$
 COOH $\xrightarrow{\text{NaOH, H}_2\text{O}}$ CH₃OCOO \longrightarrow COOH

DEAD,
$$Ph_3P/THF$$

CH₃OCOO

COOCH₂CH

C₃H₇

C₃H₇

FIG.1A

Reaction(II)

HO COOH
$$C_{10}H_{21}Br$$
NaOH

$$C_{10}$$
H $_{21}$ О—СООН F I G . 1 В

Reaction(III)

HO—COOCH₂CH
$$C_3H_7$$
 $+$ C_3H_7

$$C_{10}H_{21}O$$
 $COOH$
 $DCC/DMAP$
 THF

$$C_{10}H_{21}O$$
 $C_{3}H_{7}$
 $C_{3}H_{7}$

FIG.1C

Reaction(I)

FIG.2A

Reaction(II)

HO
$$\stackrel{\text{NaOH H2O}}{\longleftarrow}$$
 HO $\stackrel{\text{COOH}}{\longleftarrow}$

FIG.2B

Reaction(III)

$$C_{2}H_{5}$$
 + $C_{3}OCOO$ + $C_{2}H_{5}$ + $C_{3}OCOO$ F

$$\xrightarrow{\text{DEAD,PhgP,THF}} \text{CH}_3\text{OCOO} \xrightarrow{\text{COO-CHCOOCH}} \text{CH}_3$$

$$\xrightarrow{\text{C}_2\text{H}_5}$$

FIG.2C

Reaction(IV)

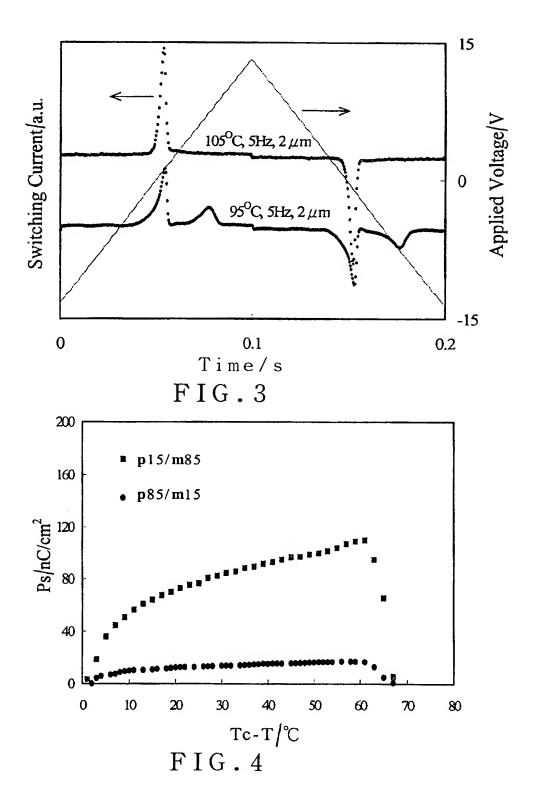
HO COOH C10 H21 Br, NaOH

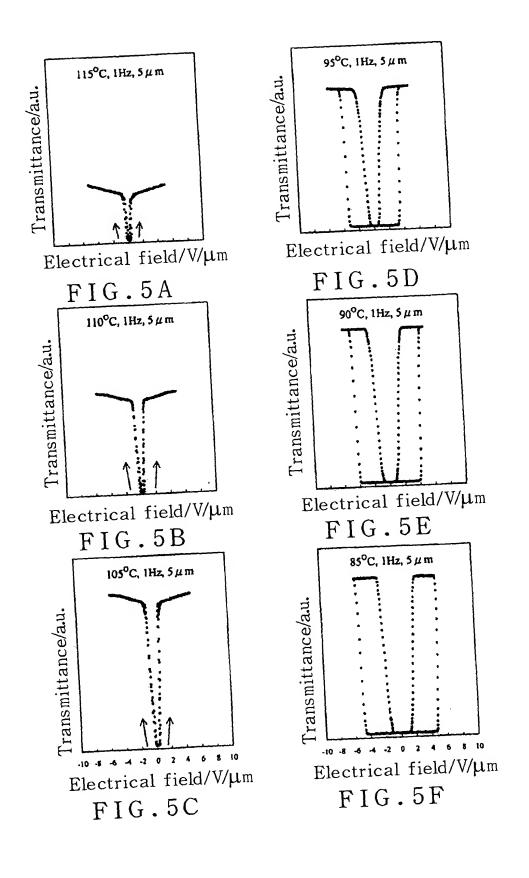
$$C_{10}H_{21}O$$
 COOH

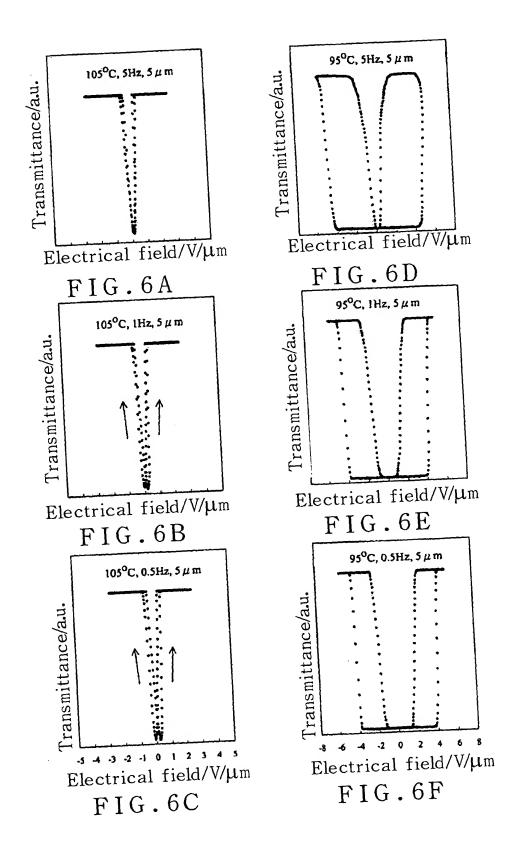
 $FIG.2D$

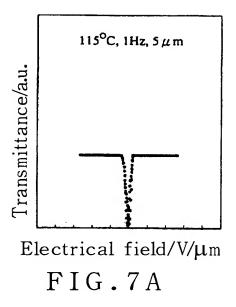
Reaction(V)

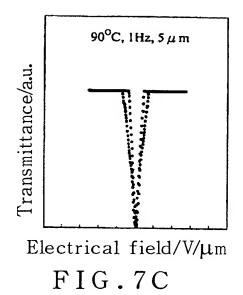
$$C_{10}H_{21}O$$
 COOH COOH COOH

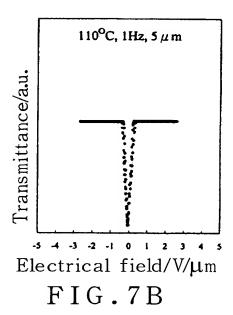


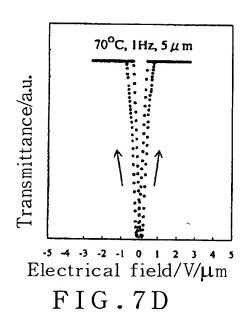












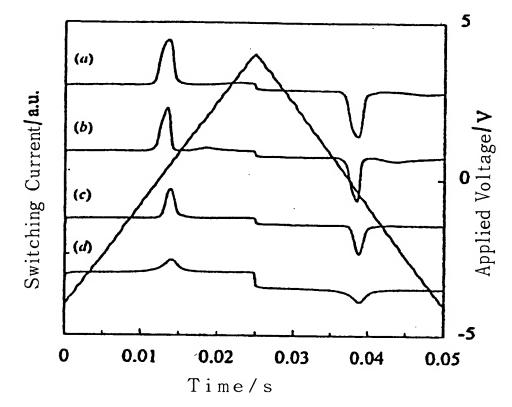


FIG.8

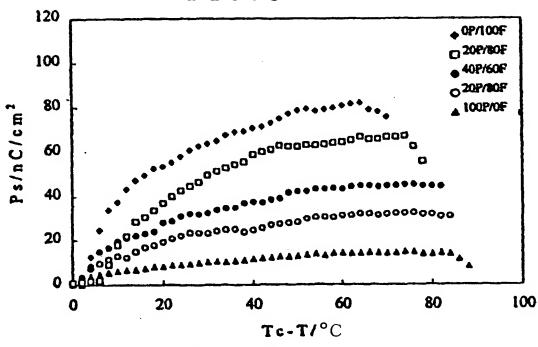


FIG.9

